



Launch Mission Execution Forecast

Mission: Falcon 9 Starlink L-19

Issued: 13 Feb 2021 / 1300L (1800Z)

Valid: 14 Feb 2021 / 2310 – 2331L (15 Feb 0410 – 0431Z)



Forecast Discussion: Continued southerly flow ahead of a frontal system will maintain unseasonably warm and moist conditions across Central Florida. This will allow showers and thunderstorms to develop as the front stalls to the north. On Sunday the front is expected to remain in the area with another round of thunderstorms likely across the Space Coast. The unsettled weather should diminish over the Spaceport by evening, but some convection could linger into the launch window. The primary weather concerns for Sunday are the Cumulus Cloud Rule and Surface Electric Field rule associated with the convection as well as the Thick Cloud Layer Rule associated with the frontal cloudiness.

On Monday, a strong low pressure area will organize in the northern Gulf of Mexico. This will pull the boundary further north, lowering the threat of organized convection over the Spaceport. The primary weather concern for a launch attempt Monday evening is the Cumulus Cloud Rule.

Launch Day	Probability of Violating Weather Constraints							
	60%	Primary Concerns: Cumulus Cloud Rule, Surface Electric Field Rule, Thick Cloud Layer Rule						
	Weather Conditions					Additional Risk Criteria		
	Weather/Visibility:	Showers / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
	Temp/Humidity:	68°F / 90%	Cumulus	Scattered	3,000	12,000	Booster Recovery Weather:	Moderate
	Liftoff Winds (200'):	200° 10 - 15 mph	Altostratus	Scattered	12,000	15,000	Solar Activity:	Low
24-Hour Delay	Probability of Violating Weather Constraints							
	40%	Primary Concerns: Cumulus Cloud Rule						
	Weather Conditions					Additional Risk Criteria		
	Weather/Visibility:	Showers / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
	Temp/Humidity:	70°F / 90%	Cumulus	Scattered	3,000	10,000	Booster Recovery Weather:	Moderate
	Liftoff Winds (200'):	210° 7- 12 mph	Altostratus	Scattered	15,000	17,000	Solar Activity:	Low
<i>Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.</i>								
Next Forecast Will Be Issued		As Required						